

Installing the Extended Cross Slide Travel Kit

The Extended Cross Slide Travel Kit (PN 4450) adds one inch to the travel of the cross slide on 7x10, 7x12, 7x14, and 7x16 mini lathes. These are SIEG C2 and C3 lathes. The increased travel is away from the centerline of the lathe so you can work on larger diameter work pieces. This kit replaces the saddle and the cross slide feed screw. It also includes a spacer for the longer screw.



You will need the following tools:

- Hex (Allen) wrenches (2.5, 4, 5, and 6 mm)
- The end wrenches that came with your mill (14 and 17 mm)
- A #2 Phillips screwdriver

Expect to spend about one hour on this project.

Teardown

Follow this procedure to disassemble your lathe.

Keep track of the fasteners you remove. You will need them to reassemble your lathe.

Preliminary

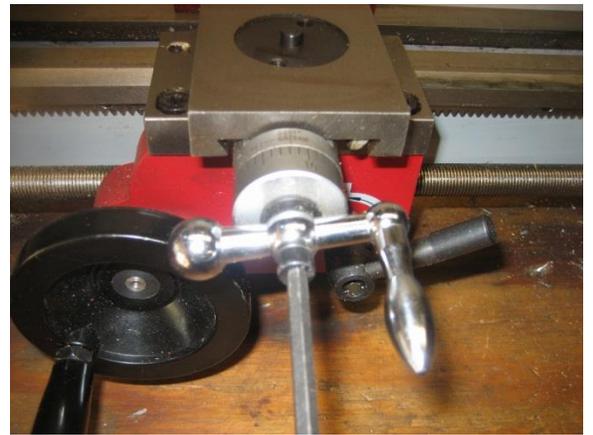
1. Unplug the power cord.
2. Remove the tailstock.

Saddle

1. Back the compound rest until the mounting bolts are exposed. Remove the compound rest. There are two socket head cap screws.



2. Remove the hand crank from the cross slide. There is one socket head cap screw. Note the position of the washers and spacers.
3. Wrap the graduated dial with a rag and pull it off. There is a spring under it that will be captured by the rag.



4. Remove the cross slide screw retainer. There are two socket head cap screws.



5. Unscrew the feed screw to remove it. It is a left hand thread.



6. Loosen the gib adjusting screws and slide the cross slide off the saddle to remove it.



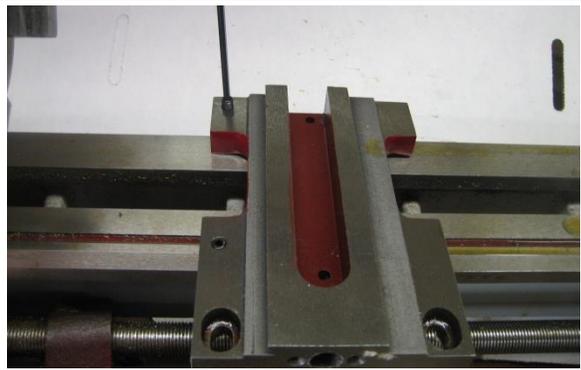
7. Detach the apron from the saddle. There are two socket head cap screws.



8. Remove the front and rear saddle retainers. There are six socket head cap screws.



9. Remove the set screws from the follower rest mounting holes. Remove the saddle from the ways.

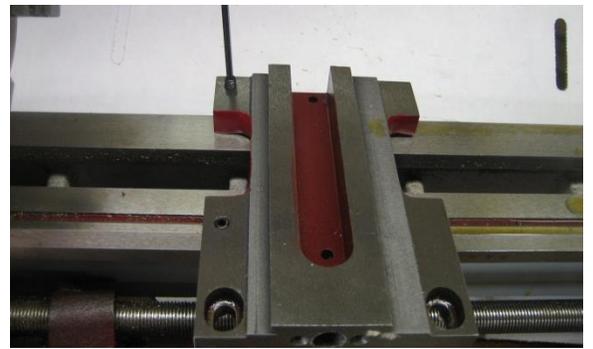


Installation

Follow these steps to install the kit.

Chris' Tip: This is a great time to install a Tweaks and Enhancement Kit. It will make all the adjustments much easier.

1. Place the new saddle on the ways.
Replace the set screws in the follower rest mounting holes.



2. Reinstall the front and rear saddle retainers. There are six socket head cap screws.
3. Loosen the four adjusting setscrews and nuts. Back off the setscrews.
4. Slide the carriage onto the ways.
Keep it near the right end of the ways.
5. Snug up the six adjusting socket head cap screws to remove play, but allow the carriage to move freely.
6. Snug up the four setscrews and tighten the four lock nuts.



7. Reattach the apron to the saddle.
There are two socket head cap screws.



8. Loosen the three lock nuts on the side of the cross slide.
9. Slightly loosen all three setscrews on the side of the cross slide.
10. Slide the cross slide on the saddle.
11. Snug each setscrew equally. This will lock the cross slide in position.
12. Loosen each setscrew 1/8 turn to allow the cross slide to move.
13. While holding the setscrews from turning, tighten the lock nuts.
14. Test by moving the cross slide. Loosen or tighten all the setscrews the same amount until the cross slide moves freely, but without play in the dovetail.



15. Place the new spacer (not shown in the photo) on the threaded end of the lead screw. It does not matter which way it is installed.
16. Screw the new feed screw in to install it. It is a left hand thread.



17. Replace the cross slide screw retainer. There are two socket head cap screws.



18. Replace the graduated dial and spring. Put the graduated dial onto the shaft leaving the spring groove exposed.
19. Place the spring in the groove with the “hump” up. Press on the hump with a screwdriver and push the graduated dial into place.
20. Replace the hand crank onto the cross slide. There is one socket head cap screw. Note the position of the washers and spacers.



21. Replace the compound rest. There are two socket head cap screws.

